Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently amended) A process for the automatic control of the thickness of an extruded film, comprising:

measuring a thickness value profile of the extruded film with a thickness-measuring probe that is moved along a surface of the film in a direction (x) that is substantially perpendicular to a conveying direction (z) of the extruded film, the thickness-measuring probe recording for each measuring cycle the thickness value profile of the film at least across parts of an expansion area of the film in the direction (x) perpendicular to the conveying direction (z) by measuring thickness values in equidistant time intervals;

transmitting the measured values to a control unit;

storing the measured values in a storage unit;

determining statistical values of the film thickness with a computer, the computer accounting for the measured values or information derived therefrom using a fixed number of the measuring cycles and providing measured values from recent and previous measuring cycles with different weighting factors, the measured values obtained during a predetermined time-frame at a

start of the extrusion process being more heavily weighted by the computer than the measured values obtained during a normal operation subsequent to the predetermined start time-frame;

determining deviations in the statistical values of the film thickness from a target value; and

generating control commands to a device for controlling the film thickness.

2. (Previously presented) The process pursuant to claim 1 wherein the computer determines the statistical values by accounting for the measured values or the information derived therefrom using a smaller number of the measuring cycles during the predetermined time-frame at the start of the extrusion process than a number of the measuring cycles used during the normal operation.

3. (Previously presented) The process pursuant to claim 1 wherein the computer determines the statistical values during the predetermined time-frame at the start of the extrusion process and at least one previously measured value is provided with a smaller weighting factor than the weighing factor used during the normal operation.

4. (Previously presented) The process pursuant to claim 1 wherein the computer determines the statistical values during the predetermined time-frame at the start of the extrusion process

and at least one recently measured value is provided with a
larger weighting factor than the weighting factor used during the
normal operation.

5. (Currently amended) The process pursuant to claim 2 wherein at
least one of the number of the measuring cycles and the weighting
factors after the start of the extrusion process ~~are~~ is made to
approximate in steps at least one of the number of the measuring
cycles used in the normal operation and the weighting factors
used in the normal operation.

6. (Currently amended) A device for the automatic control of the
thickness of an extruded film, comprising:

a thickness-measuring probe that measures a thickness
value profile of the extruded film that is moved along a surface
of the film in a direction (x) that is substantially
perpendicular to a conveying direction (z) of the extruded film,
the thickness measuring probe recording for each measuring cycle
the thickness value profile of the film at least across parts of
an expansion area of the film in the direction (x) perpendicular
to the conveying direction (z) <u>by measuring thickness values in
equidistant time intervals</u>;

a device that transmits the measured values to a
control unit;

a storage unit that records the measured values and
information derived therefrom;

a computer that determines statistical values of the
film thickness by accounting for the measured values or the
information derived therefrom using a fixed number of the
measuring cycles and providing measured values from recent and
previous measuring cycles with different weighting factors, the
measured values obtained during a predetermined time-frame at a
start of the extrusion process being more heavily weighted by the
computer than the measured values obtained during a normal
operation subsequent to the predetermined start time-frame, and
determines deviations in the statistical values of the film
thickness from a target value; and

a device that generates control commands to a device
that controls the film thickness.

7. (Previously presented) The process pursuant to claim 2 wherein
the computer determines the statistical values during the
predetermined time-frame at the start of the extrusion process
and at least one previously measured value is provided with a
smaller weighting factor than the weighing factor used during the
normal operation.

8. (Previously presented) The process pursuant to claim 2 wherein
the computer determines the statistical values during the

predetermined time-frame at the start of the extrusion process
and at least one recently measured value is provided with a
larger weighting factor than the weighting factor used during the
normal operation.

9. (Previously presented) The process pursuant to claim 3 wherein
the computer determines the statistical values during the
predetermined time-frame at the start of the extrusion process
and at least one recently measured value is provided with a
larger weighting factor than the weighting factor used during the
normal operation.

10. (Currently amended) The process pursuant to claim 3 wherein
at least one of the number of the measuring cycles and the
weighting factors after the start of the extrusion process ~~are~~ is
made to approximate in steps the number of the measuring cycles
used in at least one of the normal operation and the weighting
factors used in the normal operation.

11. (Currently amended) The process pursuant to claim 4 wherein
at least one of the number of the measuring cycles and the
weighting factors after the start of the extrusion process ~~are~~ is
made to approximate in steps at least one of the number of the
measuring cycles used in the normal operation and the weighting
factors used in the normal operation.